

# Evolution of Cash Management and the Retailer

A White Paper by Ed Grondahl Q1/07

## From Till Balancing – to Robbery Prevention - to Cash Security - and now to Today's - Total Cash Management Solution

Prior to 1977 you might say that retail cash management was run by a cash register, dating back to its invention in 1884 by John Patterson, founder of National Cash Register. NCR made registers with up to 8 cash drawers to balance tills by cashier. The old adage from this era was, “a good bartender, with questionable ethics, will own your bar in 5 years”.

Throughout the 60's & 70's gas stations began to carry more and more grocery items such as cigarettes, candy, soda and beer until the Convenience Store became an Industry, and by the mid-seventies, stores began to extend their hours of operation. With late night hours there was a significant increase in the incidence of armed robberies, and the Industry went out to find the cause and a solution. By interviewing hundreds of robbers in prison, it became clear that robbers targeted stores with easy access to cash and easy escape routes, and had very little, if any, regard for alarms or surveillance technologies.

In 1977 The Southland Corporation, which at the time owned and operated 7-Eleven stores, began installing Timed Access Cash Controllers, which is known today as the TACC. These units were manufactured by Tidel Systems, Inc., which was one of their wholly owned subsidiaries. Money was continually moved from the till to the TACC to keep the cash register balance low. Bills and coins were readily available when the cashier ran short in the register, on a time delayed basis. When change was needed, the cashier pushed one button and a single tube of coins or bills was vended. The TACC would then go into a time delay, most typically 2 minutes, before another tube could be vended. The reduction in armed robberies was significant; 82% in a few years, and the dollar losses cut by 76%.

An Industry of Cash Security and Robbery Prevention was launched by Tidel Systems and today Tidel has installed over 200,000 TACC units in over 40 countries. Other contributors to the reduction in armed robbery were improved lighting inside and outside the store, putting the Tidel TACC in full view (painted orange), and well trained cashiers keeping till balances under \$50. The result was the robbers went to a more profitable robbery location just down the street, to a store without a TACC.

In the early 2000's the use of bill readers came about. Bill readers added two major improvements to safes throughout the world - reading and totaling bills entered into the safe, and virtually eliminating counterfeit bills from being accepted. By reading and totaling bills, it reduced the amount of time spent in the back room counting money. This

unsecured area (typically the manager's office) is still an easy target by ex-employees or smart crooks. The most dangerous time for the manager is from the moment the money leaves the safe to the time it reaches the bank or armored car. The bill reader/counters have stopped another type of criminal who had found success in spending his counterfeit bills in a retail store. Only one major negative arose - every time a new bill was released by the government of the local country, a visit must be made to each store with a bill reader to load the software for new bill recognition. Most users today feel its well worth it; new bills are coming out at about 1 to 2 per year per country. With 2,000 stores, that's 2,000 service calls. Today an up to date safe with a bill acceptor can be updated over the internet, don't get caught with the older model with manual on-site currency updates.

In 2002 another major computer evolution came along. Most new or updated stores had added LAN (local area network), since they had many devices to monitor. End-of-day balancing could now be printed from the POS or safe and input, using a PC in the back room, to update headquarters. In more sophisticated models of the early 2000's the totals could be picked up on the network and downloaded to a central computer. Sadly, some devices took a nonstandard route, where only the safe company or CIT had instant access to data. You should have your data when you want it, formatted like you need it, and it should be secure and confidential.

The new electronics have proved adequate for the past few years. The on-line electronic, intelligent safes moved things in a positive direction, but one major negative factor still existed - the safe was not centrally integrated into the POS system for total cash management. This means, while a cashier could "deposit" money from the till into the safe, there was no absolute proof it got there. Also, if it disappeared somewhere down the line during counting or depositing, it couldn't be positively identified at what point it disappeared. During the early 2000's reality set in. Stores did not have a concise picture of their cash inventory; the safe was an island of cash separate from the POS. This relates back to the original story; some employees do not have the highest ethics and the Industry set out to further define true Total Cash Management.

In the mid 2000's, Tidel Engineering released a product known as Sentinel, a major step forward for the Industry and one still not equaled within the Industry. While taking totals from the safe and sending them to a central computer proved a time saving solution, it still did not take responsibility for managing every item of currency in the store. The Sentinel came along with the capability of being managed by POS devices available everywhere today. Communicating back and forth between the POS and the Safe at the transaction level is known as Push/Pull Technology and to be useful and easy to implement, it must be done using industry standard technology.

Examples of cash management implementations are as varied as the number of Loss Prevention Managers working around the globe today. Let me give you 3 scenarios. These POS and Cash Management Solutions are new and up-to-date ideas, but certainly not all encompassing.

**Example 1** - One of the largest convenience store chains has a policy to limit the till to under \$50 during the day and under \$38 after the evening rush (no cash = no robbery). With this in mind, they allow the cashiers to manage their tills to that dollar value, but

NEVER allow a \$20 bill in the till. The POS can remind them once they say they need change for a \$20, and the Safe is smart enough to know it must receive at least one \$20. (\$50's or above are not allowed to be cashed for obvious reasons, but the safe can accept any bill in any country.) If the deposit is not received, the Sentinel notifies the POS who then tells the cashier, called a NAG, to do the deposit and get the \$20 bill out of the till. When the safe receives the currency, it talks back to the POS saying all is clear for the next transaction. Cashiers can drop any amount at any time they feel its necessary.

**Example 2** - A large convenience store's Loss Prevention Manager wanted a system he could control any time the till amount went above a threshold. The POS tells the cashier that they must deposit a specific amount of money, or more, to get back below the till threshold (thresholds can vary in more dangerous areas). The POS directs the Sentinel to accept at least the minimum amount calculated by the POS of the upcoming safe deposit. The Sentinel then validates the bills and accepts them and remains ready until the cashier presses the DONE key. At that point the Sentinel tells the POS exactly what the deposit was, first for accounting purposes and second to let the POS decide if the NAG is complete. If not, it gives a new, lower amount that must be put in the safe before the next POS transaction. This assures the retailer that there is no way the cashier will let cash build up in the till, hence thwarting armed robbery and internal shrinkage.

**Example 3** - This retailer wants to NAG the cashier every hour, on the hour, to skim the till. They leave the amount up to the cashier, but do not depend on the cashier to enter the amount. They must skim at least one bill from the till and instructions on till limits are clear. The Sentinel again reads the money being entered into the safe and reports exactly what was deposited. If the DONE KEY is pressed with no bill being entered, this violation is reported. All Sentinel transactions are reported back to the POS for the specific cashier and the cash balance of the entire store is fully accurate and accounted for.

The Industry will not stop there. Many exciting additions are coming in 2007 and beyond. Rolling coins and bills and putting them in tubes is expensive. Banks or CIT companies roll the coins for a fee. Somebody has to load the tubes in the safe, both bills and coins, and each requires an inventory-in transaction. Either the CIT company or the Manager of the store normally does the loading and inventory adjustments.

To cut costs and save time, a new convenience is coming to market worldwide - Bulk Coin Dispensers (BCD). While safes today hold 80-120 tubes for cash, the Bulk Coin Dispensers hold enough coins to replace 400 tubes and more, depending on the size of the coins in that specific country. Loading is by a large bag of coins, which are available with no bank fee, and loading takes seconds rather than minutes. Filling the start-of-shift cashier tills requires no counting. The cups are automatically loaded with exactly what the cashier needs for a starting change fund. More time and money are saved, and less entries brings even greater accuracy than managing tubes in a change fund. Refilling the safe is only done 15%-20% as often since the inventory of coins is so large in a BCD.

Retail stores today who operate the safe via the POS for 100% Cash Management also shorten the end-of-day from hours to minutes, allowing the store manager to spend that time in the retail area, improving sales, store cleanliness, training cashiers, and overall,

improving customer service. The higher up the Cash Management solution a retailer goes, the quicker the ROI results. Most major store chains have found they are getting ROI payback in 7 months or less. Cash Shrinkage has improved by .5% to 1.52%, depending on the individual Loss Prevention and Internal Auditor's experience.

Now for the final ingredient in Cash Management; Service and Support. As the Safe becomes an integral part of the store's network, it must be running. When it does go down, it must have a level of service equal to a Server, or POS System or other integral parts of the customer network. Treating the safe as any less, or servicing it with the local locksmith, is a mistake and something that will become evident when the network needs debugging.

Major service organizations have entered the marketplace that can do network diagnosis and determine where a problem lies: in the safe, in the POS, on the LAN or WAN connection or at headquarters. The days of the same service person fixing every piece of the store's equipment have all but disappeared. A 24 X 7 helpdesk from your Safe company has been a requirement for years now. Tidel Engineering, for example, has organized parts and labor in 120 countries globally. The service person who attends the problem is bonded to work on devices where cash theft is an issue. Add to this a service level of next business day, or next calendar day, or even 4-hour onsite repair. As companies move into complete Cash Management Solutions, it does little good if hardware, software or the network is down for any significant period of time. You are the one to determine the period of time you can live with.

### **Summary**

- Cash Management has been worked on diligently by retailers since at least 1884.
- Many types of theft, armed robbers, employees and counterfeit bills each have to be looked at and solved.
- A side benefit of cash management is freeing up your store manager from manual tasks.
- Full automation of cash management will deter attempts and improve shrinkage by over 1% of sales.
- The right Cash management system will provide an ROI of less than 7 months.
- Allow the POS to be the control point for balancing all of the cash, not just the till.
- Determine for yourself if service and support is adequate to run your business.
- Insist that you run your business your way, not the way a product off the shelf was designed. If the safe cannot be customized for every one of your requirements, move on to another brand, this is one key area in your business that cannot be overlooked.
- If you are not ready to implement everything at this time, buy a system that can grow with you as you have time to do a full Cash Management implementation.

I hope each of you reap the benefits of implementing a Total Cash Management System.